

**Proposal Title: The Pacific Northwest (PNW) Mass Timber Tech Hub**  
**Lead Applicant: Oregon State University (OSU)**

**EXECUTIVE SUMMARY.** The PNW Mass Timber Tech Hub will transform our region into a global competitor in the burgeoning field of mass timber design, manufacturing, and construction. Mass timber technology creates wood-based structural building components that can replace concrete and steel. It significantly cuts carbon emissions, while speeding up construction, reducing waste and increasing resilience. Ten years ago, there were a handful of mass timber buildings in the U.S.: [today over 2,000 are in design, construction or completed in all 50 states](#), with annual growth around 25%. There is tremendous expansion potential: [5.9M commercial and 264,000 multifamily residential buildings were constructed in the U.S. in 2019](#).

Washington and Oregon were early adopters of mass timber, and are home to architecture, engineering, manufacturing, and construction firms whose expertise leads the nation. But European producers, who adopted the technology two decades earlier, are increasingly targeting our market with high-quality products that undercut U.S. offerings. Our Hub will optimize domestic production efficiencies, eliminate the current 15% price differential, and facilitate rapid TRL6-ready lab-to-market innovations. We will address known concerns by increasing access to fiber and growing the pool of diverse workers with skills needed to propel our companies to global leadership. We will connect manufacturers and real estate developers with investors and lenders, streamline certification pathways for new products, and provide robust market, financial and technical performance data. Our Hub will benefit urban and rural communities equally, alleviate housing shortages, ameliorate climate-related threats, and address national security challenges such as reliance on foreign-sourced steel.

**OUR OVERARCHING GOALS** are to build upon Oregon’s (OR) and Washington’s (WA) traditional timber industry strengths as the nation’s #1 and #2 producers of lumber respectively, leveraging the early mass timber leadership of our companies and our excellent university-based R&D capacity, and guided by our deep understanding of barriers and challenges facing our mass timber supply chain, to deploy a multifaceted set of programs that will move our mass timber sector from its current position of U.S. leader to one of sustained global competitiveness. To do so, **five complementary component projects** will build upon outcomes and momentum of previous public and private investments in the region, including an EDA Build Back Better Regional Challenge (BBB-RC) award:

(1) (1) A Mass Timber Innovation Accelerator (MATINA) will include a Hub administration team consisting of the Regional Innovation Officer (RIO), a financial specialist, and a communications specialist, who will coordinate key functions of the Hub. A “**Concierge**” extension specialist will serve as the “front door” for industry to access technical and entrepreneurial development services at the three universities. A **Jobs and Training Advisor**, will build and maintain an online jobs and training portal, serving as a one-stop shop for jobseekers. A **Capital Flows and Investment Facilitator** will function as a mentor, connecting firms seeking capital with investors and financial institutions. Finally, a **Product Standards Specialist** will assist manufacturers to streamline and expedite product certification. MATINA will operate an **Innovation De-Risking Program** to make product development and testing support in university labs more accessible, and a **Materials Performance Data Program**, that will support innovation by generating performance data on bio-based materials. A **Workforce Development Program** on advanced manufacturing and construction will leverage foundational

work done through the BBB-RC grant. To build confidence in the mass timber sector and support investment decisions a **financial metrics database** of construction projects will be built, and annual regional market intelligence scans will be commissioned. Lastly, a **Multidisciplinary Action Panel (MAP)** will bring experts together to engage with state and federal government and philanthropy, to align policy and investment with Hub goals.

(2) A **Fiber Supply Program** will increase wood fiber availability on federal and tribal forests through a partnership approach. It will provide staff to complete environmental audits and planning and implementation of timber sales to increase ecological resilience and serve the industry's growing needs. This staff capacity will be focused on regions with growing mass timber manufacturing and demand for wood products. A **Tribal Forestry Program** will provide technical assistance resources to increase the use of tribal forest products in mass timber and assist tribal entities to commercialize their own mass timber products. A **Track and Trace Program** will support detailed data gathering and communications across the supply chain to build trust and transparency within the mass timber marketplace. The tribal forestry and track and trace investment will support sustainability goals, contribute to enhanced carbon and wildfire management, connect more sources of tribal wood to the supply chain, and differentiate the region from its competitors.

(3) A **Prefabricated Systems Program** will support commercialization of prefabricated affordable housing solutions that can help mass timber manufacturers achieve enhanced production efficiencies. A team of specialists will facilitate implementation of pilot projects in energy- and seismic-resilient affordable mass timber housing, retrofits, and efficient structural systems for industrial buildings, leveraging research and development work done by University of Oregon (UO) and OSU. The team includes a rural economic development expert, a full-time architect, and consulting services from UO faculty and external architectural and engineering professionals from private industry, who will: assist affordable housing developers to secure funding; serve as liaison to local building officials; and provide technical advice to contractors on fabrication and assembly and navigating supply chain issues. The team will advise on the design of modular housing planned for factory production at the Port of Portland's T2 campus and at other locations in the PNW, and on the design of long-span mass timber structural systems for industrial applications. UO's new Oregon Acoustic Research Lab (OARL), which is critical to the application of prefabricated mass timber in housing and other applications, will apply Tech Hub funding for commissioning and startup of the facility for anticipated accredited industry testing.

(4) A **Digital Public Infrastructure and Forestry Workforce Program** will bolster the PNW's mass timber sector by tackling the challenges of high material costs and a diminishing forestry workforce. The project's three-pronged approach includes ForeStack, a digital platform with open-source tools for forest inventory mapping, wildfire risk assessment, supply chain optimization, blockchain-based smart contracts, and AI-powered data hub to foster collaboration and enhance efficiency. It will prioritize worker safety by implementing innovative technologies such as exoskeletons to reduce injuries. Finally, the project will expand workforce development programs with cutting-edge training, machine simulators, and vocational modules to attract and prepare a new generation of forestry workers, especially in underserved communities.

(5) Lastly, **The Mass Timber Innovation Center at T2** (the "Center") will be constructed as the regional physical nexus for showcasing mass timber technology's potential. The Center will provide the office and convening space needed to administer the Tech Hub, while accommodating classes, prototypes, and technology demonstrations. It will be situated on a site

already undergoing redevelopment as an innovation campus aided by a 2022 BBB-RC award. The campus will be anchored first by [modomi's](#) modular housing manufacturing center, followed by a mass timber modular housing factory, the Oregon Acoustics Research Lab (OARL), and other mass timber and housing-related firms.

**OUR PATHWAY TO GLOBAL COMPETITIVENESS:** As noted in our Request for Designation, the PNW region enjoys many natural, geographical, and historical advantages that make it an ideal location for a mass timber hub. Of North America's 15 mass timber panel manufacturing facilities, eight are within 600 miles of Portland. However, even as the market for mass timber grows rapidly across the U.S., domestic manufacturers face ever-harsher competition from more experienced European producers. A case in point is the [25-story Ascent building in Milwaukee, WI](#), which became the tallest mass timber building in the world in 2022. Portland, OR innovator Timberlab provided construction expertise to the project, but the mass timber products were sourced from Europe. This scenario is all too common and, as the market expands, we *must* ensure we are not simply building a bigger market for offshore competitors. The moment to address this is *now*: [governments around the world are seeing the promise of mass timber and investing in their own domestic industries](#). Our Tech Hub will attain global competitiveness through coordinated strategies that directly address price competitiveness and other known barriers that have been identified through [formal studies](#) and extensive stakeholder consultations: uncertainty over long-term fiber supply; lack of workers with appropriate skills; inadequate access to capital; and slow commercialization of new products. The impacts of our proposed strategy can be summarized as follows:

(1) By increasing PNW wood fiber supply, primarily from restoration forestry activities, we will create jobs and lower the cost of the most critical input for the mass timber manufacturing process, enabling manufacturers to price products more competitively relative to European imports. Additional benefits of this work are reduced wildfire risk, improved forest health and better climate resilience ([USFS PNW Research Station](#)); (2) By deploying and demonstrating new technologies and practices in harvesting operations and by connecting logging contractors, logistics providers and mills through an innovative data-sharing platform, we will create improved efficiencies in fiber supply and further reduce its cost to downstream manufacturers, while simultaneously increasing the appeal and access of woodlands jobs (technology, safety, accessibility) to future workers; (3) By promoting careers in mass timber to a new generation of diverse workers and connecting them to clear skills training pathways, we will increase productivity and optimize our firms' capabilities to innovate; (4) By providing enhanced access to entrepreneurial development and technical assistance services (prototyping, new product development) at the three partner universities and at T2, we will encourage and accelerate innovation and enable manufacturers to create and offer world-class products; (5) By providing technical support for the uptake of prefabricated mass timber housing systems, we will create demand for repeatable mass timber products that will enable manufacturers to plan and execute production operations more efficiently and consistently, along with addressing the critical affordable housing shortage afflicting all west coast states; (6) By connecting mass timber supply chain firms with investors and financial institutions we will enable adoption of new technologies and approaches and improve production efficiency, while increasing the number of mass timber buildings constructed; (7) By engaging developers and providing robust market and financial data to homebuilders, developers, and lenders, we will de-mystify and de-risk the technology and

generate increased demand; **(8)** By bringing diverse expertise together in the Multidisciplinary Action Panel, we will optimize alignment between Tech Hub goals and activities, state and federal policy, and the interests of philanthropy, and; **(9)** By creating the Tech Hub, we form a nexus that connects the mass timber industry along the supply chain, sharing needs and challenges and offering new programs and supports, while providing the PNW mass timber sector with a unified voice and a mechanism for ongoing collective action.

**CONSORTIUM MEMBERS AND ROLES:** The Tech Hub is led by **TallWood Design Institute at Oregon State University (OSU)** and is based on a partnership between OSU's Colleges of Forestry and Engineering and **University of Oregon's (UO) College of Design**. TDI was launched in 2015 with state funding and a mandate to assist economic development by advancing applied R&D and education on the structural use of wood. TDI represents the first and most prolific university-based collaborative to focus on mass timber in the United States. OSU will establish and oversee the Hub management team and lead the Mass Timber Innovation Accelerator (MATINA). OSU will also lead the Digital Public Infrastructure and Forestry Workforce project. **UO's Department of Architecture** will lead the Prefabricated Systems Program and, with other UO partners (**Institute for Policy Research & Engagement, Lundquist College of Business**), will collaborate in delivering the Accelerator and Prefabricated Systems programs. **Oregon Department of Forestry (ODF)** will lead the Fiber Supply Program, together with environmental NGO **Sustainable Northwest** and **Washington Department of Natural Resources (WA-DNR)**. The **Port of Portland (Port )** will lead the Mass Timber Innovation Center at T2 construction project. Together with the **Department of Land Conservation & Development (DLCD)** and **Business Oregon**, all of these Oregon-based entities have collaborated successfully since 2020 as the **Oregon Mass Timber Coalition (OMTC)** and have been building infrastructure and capacity under a BBB-RC award since 2022.

**Washington State University (WSU)** will co-deliver MATINA activities that are focused on developing new products and using new materials, and will lead on accelerating pathways to their certification. WSU will also lead manufacturing and construction workforce development efforts across the region. **WA Department of Commerce (WA-DoC)** will coordinate engagement and involvement of Washington industry and deliver an Early Phase MT Construction Project Feasibility Grants program; and **City of Seattle Office of Economic Development (S-OED)** will launch and coordinate a Mass Timber Incubator. **Noel Johnson, Craft3**, and a committee of experienced fund managers will coordinate the Hub's access to capital strategy (see letters). **Portland Community College, Worksystems, State of Washington Workforce Training and Education Coordinating Board (WTB)** **ACE Washington** will partner on workforce development, while **Prosper Portland** will ensure alignment with city building code and economic development efforts. Nonprofit **Oregon iSector** will lead on state and federal policy alignment and philanthropic engagement.

**Freres Engineered Wood** and **Mercer Mass Timber** (manufacturing), **Mithun** (architecture), **PathHouse** (modular housing), **Swinerton Builders** (construction), **KPFF** and **Timberlab** (engineering and fabrication) will form the **private sector** foundation of the Hub. These firms and many other private sector participants will play a variety of roles (described in Letters of Commitment), including: **(1)** active participation to exchange information on needs and opportunities; **(2)** service on steering committees to guide programs and activities; **(3)** employment of new workers from training programs; **(4)** procurement of new sources of fiber;

(5) development, certification and commercialization of new products; (6) piloting the construction of mass timber housing, and; (7) investment in new equipment or production facilities. We have received commitments of participation from architecture and engineering firms (4 firms), construction (3), real estate development (5), forestry firms (4), manufacturers (7) financial/consulting (3) and four Tribal forestry enterprises.

**PRELIMINARY ACTIVITIES AND CHANGES:** In our designation request we described our intent to tackle the key barriers and challenges described in this narrative; the fundamental focus and intent of our Hub is unchanged. Immediately upon securing Tech Hub designation we embarked on an intensive process of consultation with industry, public sector partners and nonprofits to create a plan that has widespread buy-in from supply chain partners throughout the region. At time of submittal of designation request many future partners had yet to be finalized, particularly on the Washington side of the partnership. Since designation we have secured the participation of **WA-DoC**, **WA-DNR**, and **S-OED**, as well as **Craft3**, and key private sector firms. Many other partners, listed in component project narratives, have been added as project scopes have been fleshed out.

**GOVERNMENT AND PHILANTHROPIC INVESTMENTS:** **Business Oregon** has committed \$2,739,796 in funding from its University Innovation Research Fund as match for the Oregon universities-led components and will invest its own staff resources to promote increased inbound investment and support export strategies. Both **Prosper Portland** and **S-OED** will commit staff capacity to support and interact with the Hub. **ODF** is leading the Fiber Supply Program in partnership with **WA-DNR**, with each committing a match, while **OR DLCD** will participate in Hub planning meetings to identify synergies with its own **BBB-RC** code and zoning work. **WA-DoC** will provide coordination with other state government initiatives. The Port commits match to the Center and leverages T2 site prep work that is largely self-funded (with a contribution from **BBB-RC**), as well as significant self-funded activities to attract inward investment.

**Labor Unions:** The Hub has secured the involvement of the **American Federation of Labor and Congress of Industrial Organizations (AFL-CIO)**, which will engage with us in workforce development, curriculum and training planning, and policy alignment, with the goal of ensuring new employment created adheres to the Good Jobs Principles, as defined by the Departments of Commerce and Labor.

**RELEVANT POLICY AND RELATED INITIATIVES:** Oregon has been a pioneer in mass timber since 2015, when the first structurally certified American mass timber panels were manufactured in Oregon. The same year, Oregon Legislators established the **TallWood Design Institute**, providing just over \$2 million/year in ongoing funding. Since its founding TDI has leveraged this support in a 3:1 ratio, securing more than \$48M of additional funding for applied research, education, and economic development. The **USDA Agricultural Research Service (ARS)** provides \$1M/year to TDI for industry-driven applied research on mass timber, which has enabled the region to stay at the forefront of U.S innovation in this field. The **2022 BBB-RC** award, matched by \$5.9M from **Business Oregon**, is funding construction of fire and acoustic testing labs that will be essential resources to the Hub for delivery of technical services. The same **BBB-RC** award is partially funding geotechnical work and other site improvements to transform the Port's former T2 marine terminal into a **Mass Timber Housing Innovation Campus**. Located within an Enterprise Zone, this will be the physical home base of the Tech Hub. Zoning code outreach being done by **OR DLCD** under **BBB-RC** has identified communities and developers interested in revising zoning codes to allow construction of modular

mass timber housing. Oregon's congressional delegation has provided consistent and bipartisan support for the mass timber sector and has secured congressionally directed spending awards to create professional training for structural engineers. **US Forest Service** provided funding in 2023 to TDI to create quality assurance training for mass timber manufacturers and also issued a grant to **The Beck Group** (Portland, OR) for a feasibility analysis on production of thin lumber as a mass timber input, which could reduce costs for modular mass timber housing.

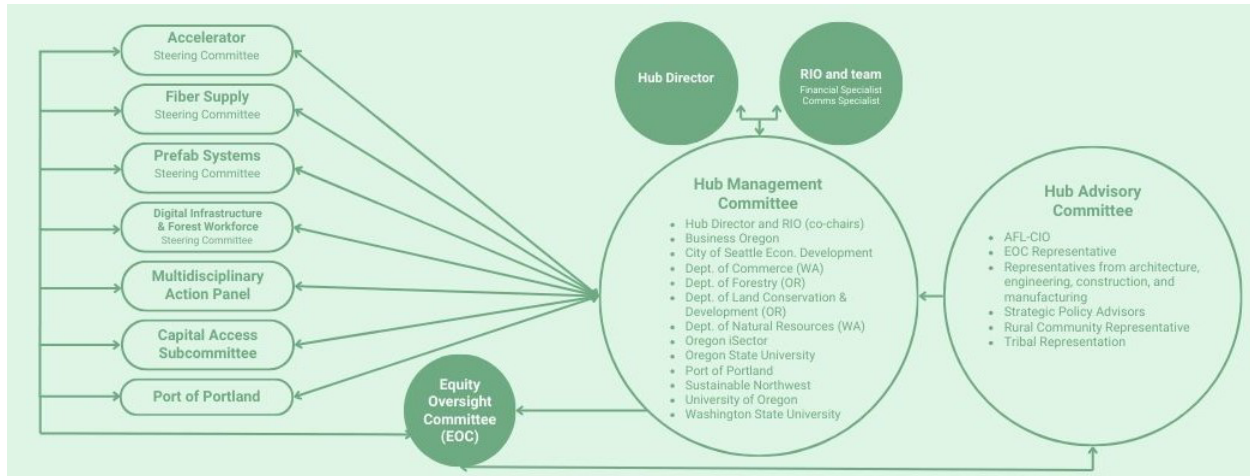
OSU and UO are offering new master's degree areas focused on mass timber. These and the existing forestry, wood science and architecture degree programs at WSU, OSU and UO will continue to serve as talent pipelines producing future mass timber leaders for the region. In 2023, UO led a bistate OR/WA effort that secured an inaugural **\$1M Type 1 National Science Foundation Regional Innovation Engines (NSF-RIE)** development award: Advancing mass timber technologies (OR, WA). The award is funding a comprehensive strategic planning process for accelerating the PNW mass timber ecosystem, which will inform the strategic direction and investment priorities of the Tech Hub's Mass Timber Innovation Accelerator.

Over the last 5 years, governors and legislative bodies of both Oregon and Washington have prioritized funding and regulatory streamlining that are designed to expedite housing production, particularly for affordable housing. **Oregon Housing and Community Services Department**, the state's housing finance agency, awarded \$5M in 2024 to **Zaugg**, an experienced European manufacturer that will establish a joint venture partnership to produce mass timber modular housing at the **Port's T2** campus by 2027. In 2023 **California's Assembly Bill 43** established a Low Carbon Building Standard, mandating a 40% reduction in the embodied carbon of all buildings by 2035, representing a significant opportunity to expand use of low embodied carbon materials such as mass timber. The Tech Hub's Multidisciplinary Action Panel will advocate for similar legislation in WA and OR.

## **GOVERNANCE, LEADERSHIP AND EVALUATION**

**MANAGEMENT STRUCTURE**: The Hub Director will be Iain Macdonald, director of TallWood Design Institute and the overall lead on this Tech Hub proposal. Macdonald has worked in senior university-based roles supporting forest industry innovation for 15 years: he will devote 25% FTE to the Hub and will head up the MATINA project. Day-to-day Hub management and coordination will be undertaken by a 3-person RIO team consisting of the Regional Innovation Officer, a financial administrator, and a communications specialist. The RIO role will be filled by Marcus Kauffman, a forestry and sustainability expert with deep knowledge of the PNW mass timber supply chain, who has led fiber supply and communications initiatives for the Oregon Mass Timber Coalition, to fill the RIO role. The Hub Director and RIO will co-chair a geographically balanced Hub Management Committee (HMC), consisting of Hub member organizations and including the leads of each component project (see chart below). A Hub Advisory Board (HAB) will provide semi-annual strategic guidance to the Management Committee: this board has coordinated membership with the one advising the UO-led NSF-RIE project. The Equity Oversight Committee (EOC) will have a representative on the HAB. Each component project will be run by a small leadership team consisting of key personnel from the executing organizations and advised by its own project steering committee. The HMC will meet monthly in year 1 and semi-monthly thereafter. Semi-annual meetings involving the HMC, HAB, EOC and project steering committees will be open to the public. Annual Hub Forums (2-

day meetings summarizing progress and inviting input from stakeholders) will be held in hybrid format, revolving around various physical locations in the PNW.



**IMPLEMENTATION PLAN:** Project-specific implementation plans, key milestones, metrics and target impacts are described in each component project narrative. The RIO, Hub Director, and Hub Management Committee will start work on 1 October 2024 or as soon as an agreement is signed with EDA. Job postings for other members of the RIO and accelerator teams will be advertised in Month 1 and all positions will be filled and active by Month 5. Steering committee membership for each component project will also be finalized in the first 5 months. While the Mass Timber Innovation Center is under construction, interim office space has been secured for the RIO and Accelerator staff in an existing building on the T2 campus. The first market scan will be commissioned immediately and also completed by Month 5. Concurrently, a detailed Hub implementation plan will be drafted, and findings from the scan will be used to identify benchmarks and fine tune target impacts. The draft implementation plan will be presented to the HAB in Month 6. Feedback from both EDA and HAB members will be solicited and incorporated into a finalized plan, to be completed by Month 8. The Hub Implementation Plan will be presented at the first annual Hub symposium in Month 12. All grant-funded non-construction activities will complete by October 2029, while construction of the Mass Timber Innovation Center will be completed by June 2027.

**EVALUATION:** Detailed self-evaluation and monitoring will be built into the Hub Implementation Plan, and the expertise of University of Missouri Assessment Resource Center (ARC) will be enlisted to perform an external mid-term review of our programs and projects. ARC has a 90-year history in project assessment and is serving as evaluator of the UO-led NSF-RIE project, which is highly synergistic with the Tech Hub program. ARC’s familiarity with our region’s needs, challenges and goals for the sector’s development will be a significant asset; their findings will be leveraged to secure follow-on funding from philanthropic and other sponsors.

**TARGET OUTCOMES AND METRICS:** The specific timelines, metrics and target outcomes for component projects are listed within their respective narratives. For the Hub overall, the most critical overarching indicators and targets are shown below (see chart), either as a target increase over Year 1 benchmarks or as a desired state at end of grant term. For many metrics, benchmarks are not yet known: these will be determined through the Year 1 market intelligence scan and skills training mapping work. Progress will be measured in subsequent annual scans, metrics will



be tracked and shared with executing partners on a spreadsheet in a secure file-sharing platform such as SharePoint.

	Indicator	Target		Indicator	Target
Firms & Workers & the Supply Chain	Startups created, out-of-state firms locating in region	10 new firms per year	Engagement & Communications	Firms and organizations engaging in Hub activities	20% increase per year
	New jobs created	4,600 jobs projected		Companies aware of and receiving Hub services	90% of firms aware, 50% participate
	Training programs created and launched	TBD (based on needs analysis)	New Product Development	New products certified and launched	10% increase per year
	Learner uptake in training/education programs	20% increase per year		Patent applications made and granted	
	Average wage	Wage increases outperform inflation	Capital Access, Leveraging, & Replication	Capital raised for (1) production facilities and (2) real estate projects	5-10 globally-influential institutional investment funds (with AUM over \$100B) direct 1% of investments to PNW mass timber sector
	New manufacturing facilities planned and opened	75% increase in production capacity by volume by end of grant		EDA dollars leveraged	EDA contribution leverages at least 500% in state and private investment
	Fiber from restoration forestry made available to supply chain	50% increase in fiber availability		Replication of Hub strategies in other regions	5 regions adapt/replicate PNW strategies
	Price-competitiveness of PNW mass timber vs competitors	PNW firms achieve price parity with overseas producers		Buildings & Housing	# of mass timber project starts in region
Diversity of participation in workforce on all levels	Overrepresentation of previously disadvantaged and overburdened individuals in the workforce	# of mass timber housing units constructed or retrofitted	6 MPP cluster house projects, 5 retrofit projects completed across PNW sites by year 5		

**CLIMATE AND ENVIRONMENTAL RESPONSIBILITY:** Our plans directly address climate change by increasing the number of buildings constructed using wood, a renewable and carbon-sequestering material, as their main structural element to replace those primarily composed of steel and concrete, which have large carbon footprints ([Mishra et.al., 2022](#)). OR and WA are governed by stringent forest practices regulations regarding replanting of harvested trees, protection of streams and wildlife, use of pesticides, etc. Our focus on restoration forestry will reduce the rising risk of catastrophic forest fires: although forests are a major carbon sink, in 2021 wildfires in the lower 48 states and Alaska represented over 3% of US emissions ([epa.gov](#)). The Fiber Supply Program will include National Environmental Protection Act surveys of forests selected for restoration forestry. Furthermore, track-and-trace work by Sustainable Northwest will provide enhanced verification of sustainable forestry practices used within the forestlands providing the wood fiber. Our Prefabricated Systems Program will accelerate adoption of energy efficient modular housing designs, and the retrofitting of older residential and commercial buildings which will lower the energy footprint of America’s existing housing and commercial building stock. Our Innovation De-risking Fund will enable university researchers to speed development of eco-friendly products: to date these have included a soy-based adhesive invented by an OSU professor that has been used in 150 million plywood boards.

**EQUITY AND SHARED BENEFITS:** The comprehensive, visible, tangible, and long-term pursuit of diversity, equity, inclusion and access is critical to the success of any organization and the



industry collectively. Today there are deep disparities in access to good jobs, housing security, and economic prosperity in the PNW ([OHCS, 2021](#); [Inslee, 2021](#)), and we are committed to using this Hub to address them head on, and to extend the reach of our activities to both urban and rural low-income individuals and communities of color, who are disproportionately affected by the housing crisis, and natural disasters. Mass timber can bridge the divide between urban residents and rural communities that were economically disadvantaged by mill closures and reductions in tax revenues for decades ([Oregon Office of Economic Analysis, 2019](#)). The mass timber sector faces challenges: construction labor shortages, an aging and shrinking logging workforce, and difficulties for mass timber manufacturers in attracting and retaining young skilled workers in rural communities. These present opportunities to diversify the workforce and highlight career opportunities to those who have not traditionally considered them. DEIA considerations have been cornerstone elements of the OMTC and NSF-RIE projects, and they will also permeate all key Hub decisions. Our principal mechanism for embedding equity in planning and execution of Hub activities will be the Equity Oversight Committee (EOC), created by OMTC in 2023 under the BBB-RC award, which includes the involvement of community-based organizations (CBOs) and multicultural engagement. The primary EOC purpose is to help guide public investment toward robust urban and rural community benefits, inclusive workforce development, transparency, and strategic public contracting opportunities. The Tech Hub will expand the EOC membership to include WA, and we have confirmed participation of the Intertribal Timber Council, to work more directly with sovereign nations. Sustainable Northwest's well-established relationships with tribal forest owners in the PNW will also be a key asset. When contracting with private industry, the Tech Hub will ensure work scopes include consultation with CBOs, Tribes, and potentially impacted residents and communities. Our RIO team will interact with Economic Development Districts to co-design and share plans, solicit feedback, and make iterative adjustments. Stakeholders will be invited to open events, including an annual hybrid-delivery Tech Hub Symposium, which will revolve around a number of locations to maximize ease of attendance. Specific equity goals will be built into all detailed workplans and the annual market scans will include assessment of our progress towards DEIA goals.

**TRADE AND NATIONAL SECURITY IMPACTS:** Our Hub will positively affect national security in numerous ways. Equitable industry growth will reduce socio-economic disparities and societal friction. Reducing the carbon footprint of our built environment will lessen dependence on foreign energy sources; while also lowering the risk of disasters due to extreme weather events, resource conflicts and population displacement. Greater use of wood in place of steel will lower our reliance on foreign steel. The U.S. mass timber sector has become a hotbed of innovation for new seismically resilient structural systems (such as the [“rocking wall” system first implemented in OSU’s Peavy Hall building](#)); these improve life safety while reducing the need to rebuild after earthquakes. Our plans to support increased restoration forestry activity will protect natural resources, improve life and property safety for communities in the wildland-urban-interface, and reduce the more than \$1B/year we spend fighting forest fires. The U.S. military is increasingly interested in mass timber and has commissioned promising blast tests ([Weaver, et. al., 2018](#)) and other research; the Army Corps of Engineers announced in 2023 a [new policy requiring all vertical construction projects to consider mass timber as a structural option](#). There is significant opportunity to use mass timber in dormitory construction and in forward-deployment military sites, as well as for rapid shipment to disaster-affected areas, due to its strength-to-weight ratio and ease of prefabrication. In support of trade security, the primary goal of our proposed

program of work is to redress the current price/economy of scale advantages of European mass timber producers, so that the continued expansion of the U.S. market can fuel rapid and sustained growth in domestic manufacturing and the associated supply chain.

**HOUSING DEMAND:** The job increases created by our Hub will be spread across many communities in both states, therefore we do not anticipate a dramatic increase in demand for housing or wraparound services at any one location. In common with many regions, Washington and Oregon face severe housing shortages that inhibit economic growth in rural areas and exacerbate housing insecurity for the most vulnerable. Both states and their respective jurisdictions are effective at deploying available HUD tools. Moreover, the governors and legislative bodies are [enacting new laws](#) to make needed construction easier, and [appropriating unprecedented amounts of funding](#) to spur production. Tech Hub activities will complement and leverage this by accelerating commercial availability of mass timber panelized and volumetric modular housing units and extending the life of existing housing through retrofitting.

**SUSTAINING THE HUB:** The long-term sustainability of Hub operations after the 5-year EDA funding period has been a central consideration during our planning and consultation process. We see an ongoing need for a small, agile team to facilitate communication and consultation among supply chain partners, universities, and other public entities. For this reason, the Hub's 3-person RIO management team, together with the Jobs and Training Advisor, and including the operating and building lease costs for the Mass Timber Innovation Center, will transition from OSU's stewardship to a 501c3/industry association format in Fall 2029. Funding will come from industry association membership dues payments, augmented, if necessary, by state and philanthropic grants. TDI is experienced at setting up these kinds of arrangements: its [REACTS research consortium](#) is an example. Part of the RIO's mandate will be to design and implement a transition plan, form the 501c3, and secure the necessary industry commitments ahead of this transition. However, the Hub Concierge, and the Product Standards Specialist will become long-term core positions funded by OSU and WSU Extension Services respectively, and TDI will take over maintenance and funding of the financial metrics database. Innovation de-risking services will continue on a full cost recovery basis, with the onus shifting to client companies to apply for SBIR or similar grants to lower their R&D costs. Training developed under the EDA grant will be offered on a cost-recovery basis. Industry sponsorship will be requested to fund career promotion activities and the high schools outreach program.

Many services delivered by the Hub, such as the Prefabricated Systems Program, will be reviewed at the 4-year mark to evaluate the need for continuance beyond the grant period. Philanthropic and state funds, as well as federal grants such as USDA Wood Innovations Program, will be sought, if determined they remain a requirement. We expect that after 5 years of industry support by the Capital Access and Investment Facilitator, robust links will have been created between industry and sources of investment and lending capital, and firms will have developed sufficient capacity to effectively secure needed capital. In the same way, the Fiber Supply Project aims to build confidence in sustainable sourcing and create robust state-federal working partnerships and momentum such that funding beyond the grant term will not be needed. The materials performance data program is not planned to continue beyond the grant term. Any further opportunities for innovation discovered during the project term will be pursued with grant funds through USDA, NSF and other funding sources. We expect it will be beneficial to continue policy coordination work via the Multidisciplinary Action Panel: since philanthropy will be engaged with that group there will be opportunities to secure future funding support.